Big Lake Dam
Dobbins Air Reserve Base
West side of Fourth Street,
0.2 mile south of Atlantic Avenue
Marietta
Cobb County
Georgia

HAER No. GA-116

HAER No. GA-116

HAER GA 34-MARI, 3-

# **PHOTOGRAPHS**

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
National Park Service
Southeast Region
Department of the Interior
Atlanta, Georgia 30303

### HISTORIC AMERICAN ENGINEERING RECORD

BIG LAKE DAM

HAER No. GA-116

Location:

West side of Fourth Street, 0.2 mile south of Atlantic Avenue,

Dobbins Air Reserve Base, Marietta, Cobb County, Georgia.

USGS Marietta Quadrangle, Universal Transverse Mercator

Coordinates: 16.729120.3755820.

34-111AR1

HAEL

Date of Construction:

1906.

Present Owner:

United States Air Force Dobbins Air Reserve Base Marietta, Georgia 30069.

Present Use:

The dam impounds a 28-acre recreational lake.

Significance:

This straight-crested gravity storage dam demonstrates an early use of concrete construction in Georgia and is perhaps the earliest identified concrete dam in the state. The dam measures some 550' in length, making it one of the longest dams in the state as well. The dam and the lake it impounds were built to provide water to the city of Marietta and water and power to the Marietta Paper Manufacturing Company, an entity owned by the dam's builder, the Georgia Manufacturing & Public Service Company. The dam and reservoir operated for less than 20 years and only provided water to Marietta for about three years. The standpipes, pumps, underground pipes, associated machinery, and plant in Marietta no longer survive. Big Lake Dam and Big Lake are a rare example in Georgia of a fairly large-scale water impoundment facility constructed for a

small municipality.

# PART I. PHYSICAL SETTING

A marble plaque set in the downstream face of the dam's northern abutment gives the company name and personnel responsible for building the dam as well as the structure's date of construction. The information on the plaque reads as follows:

ERECTED BY
THE GEORGIA MANUFACTURING & PUBLIC SERVICE CO.
MOULTRIE M. SESSIONS, PRESIDENT.
E. J. POWERS, VICE-PRESIDENT.
J. H. WALLACE, C. E., NEW YORK CITY.
HOWARD NEELY, CONTRACTOR, CHATTANOOGA, TENN.
W. W. MCCULLOUGH, C. E. SUPERINTENDENT.
1906.

A review of historical records has not identified the historic name of the dam or the lake. Deeds, period newspapers, and secondary histories of Cobb County make only minor mention of the dam and its water and power system and never give them a name. It may be that the dam and reservoir never had an official name. They are commonly referred to by Dobbins Air Reserve Base (DARB) personnel as Big Lake Dam and Big Lake, due to the fact that the base contains two lakes and Big Lake is the larger of the two. By definition, Big Lake Dam is so named because it impounds Big Lake. Little Lake is located approximately 0.3 mile east-northeast of Big Lake and is impounded by an earthen dam.

As noted on the plaque, Big Lake Dam and Big Lake were built in 1906 by the Georgia Manufacturing & Public Service Company, which had taken over operation of the Marietta Paper Manufacturing Company that same year (*The Marietta Journal*, 11 January 1906). The paper company originated in the antebellum period, but in the late nineteenth century it expanded its operations and constructed a reservoir to serve the needs of a new plant in Marietta as well as a planned additional factory (Temple 1989 [1935]:405–406). The city of Marietta was in need of a municipal water system, so the Marietta Paper Manufacturing Company was granted a franchise to construct and operate a waterworks as part of its development (*Marietta Journal*, 24 October 1895). This system was located on Rottenwood Creek north of DARB.

The expansion and construction of the waterworks apparently taxed the financial resources of the company, and by 1900 it was facing foreclosure. An investor from Ohio kept the company operating for a few more years, but in 1906 the company was reorganized as the Georgia Manufacturing & Public Service Company. The reservoir on Rottenwood Creek was proving inadequate for the city, and improvements made about 1904 apparently did not solve the problem (Wheaton and Reed 1989:18–19). The new investors immediately acquired land at what is now DARB from the William J. Thomas estate for the construction of a new reservoir (Cobb County Superior Court Clerk's Office [CCSC] 1906: Deed Book [DB] II:1, 3).

The deed from the Thomas estate granted the company the right to build a 25' dam across the branch on Land Lot 198 and to construct and maintain pipelines across any property of the Thomas estate. The company hired J. H. Wallace as engineer for the project. Wallace had been involved in paper manufacturing and hydrologic engineering in New York. The dam was constructed as planned and apparently was soon supplying water to the city. A 12" pipe

extended from the new reservoir to the pumping station at Rottenwood Creek, which probably conveyed the water to the standpipe in Marietta. The system also supplied power to Marietta and the Marietta Paper Manufacturing Company, the main plant of which was located on Denmead Street north of the city (CCSC 1913: DB OO:62).

This incarnation of the company also ran into financial difficulties. By 1909 the operation was held by Trust Company of Georgia, and there was growing dissatisfaction with the service provided. In 1908 the city exercised its option to construct a publicly owned waterworks, a right retained in the original franchise granted in 1895. On the first of January 1910, the waterworks, power plant, and paper mill were sold by Trust Company to the Kennesaw Paper Company. That same year the city of Marietta completed its new waterworks system on Sessions Road (CCSC 1909: DB OO:62; Temple 1989 [1935]:476; Wheaton and Reed 1989:19).

It is not known if the Kennesaw Paper Company operated the reservoir, power plant, mills, or some combination thereof during its ownership of the property. In 1913, however, the company was put under the control of George C. Walters as trustee. Walters was granted the right to "sell all or such portions of the properties as he may be able to sell, and he may make such sales for such considerations, at such prices and upon such terms as he may think best" (CCSC 1913: DB WW:67). In 1917, the "Waterworks Plant and system" were sold to J. B. McCrary, later the J. B. McCrary Company (CCSC 1913: DB WW:647, 1923: DB 78:212, 223). Rev. J. C. Bankston, Jr., who moved to the area in the late 1920s, recalls that Big Lake was dry at that time, although it was not grown up with vegetation, indicating that it had not been dry for long. The site was managed by the Thom family, although Bankston could not recall what (if any) purpose the reservoir served during the years before DARB was constructed (J. C. Bankston, Jr., interview, 5 June 1996). The J. B. McCrary Company sold Big Lake Dam and its reservoir to the American Trading Corporation of Florida just prior to their purchase by the federal government (CCSC 1942: DB 146:397, 147:281).

What is known of the dam's original form and appearance is based exclusively on physical inspection, since no drawings, early views, or textual references have been discovered to date that denote or describe the original plan and detailing. It appears that the dam at its present length of approximately 550' is original. The height of the dam—approximately 27' at the spillway—is also likely original, minus the additional 1' for the later concrete and stone cap. The location of the spillway appears to be original, although its current width of approximately 35' may not be original owing to deterioration over time. The marble plaque in the downstream face of the northern abutment, located some 95' north of the spillway, appears to be original. A small intake structure of concrete and wood protrudes from the lake some 80' north of the spillway, just a few feet from the northern abutment. It is not known if this structure is original. A square opening at the base of the downstream side of the dam near the spillway is a former outtake tunnel; its function has been replaced by a later outtake pipe directly above it. Two concrete buttresses, one large and one small, are located on the downstream side of the southern abutment. The large buttress is located approximately 150' south of the spillway; the small buttress is located some 145' farther south. It is not known if the buttresses are original or if they were later additions.

Big Lake currently has an area of approximately 28 acres. It is not known if the present size of the lake matches its original size. There is evidence of silting, yet there may also have been bank erosion over time, resulting in little net change to the overall area of the lake.

In addition to the concrete and stone cap and the outtake pipe noted above, the dam exhibits several other alterations and additions. Over time, there have been many attempts to patch cracks in the dam with mortar, usually with limited success. The cracks have been caused by water leaching through and under the dam and by intrusive vegetation (mainly vines). These forces have also caused the concrete face of the dam to spall in numerous locations. The cracks, the patches, and the damage wrought by water and vegetation have disfigured the uniform appearance and color of the dam's face. Erosion at the spillway has led to the loss of the concrete face, exposing the underlying stone and aggregate. Within the spillway, there is evidence of later concrete and stone patchwork, which has itself been eroded by the constant pressure of water flowing over the dam. The pumps, machinery, and pipes near the dam that were part of the larger water and power system no longer survive. These elements were located at the dam and to the south where the DARB east-west runway now sits. Those elements of the system located in Marietta, such as the underground pipes and the standpipes, are no longer intact or have been removed entirely.

Later additions to the dam include a modern metal stair and catwalk resting on a concrete slab. This structure is located at the base of the downstream side of the dam just north of the spillway. The modern outtake pipe is located at the south end of the catwalk. A steel frame is attached to the face of the dam above the catwalk. It is a modern fixture, and its original use is not known. A modern metal ladder-type stair that accesses the dam crest is located some 55' north of the spillway on the downstream side of the northern abutment. It appears to be of the same vintage as the stair and catwalk.

# PART II. HISTORICAL CONTEXT

Cobb County was established in 1832 out of Cherokee County. The land within the county was surveyed and divided into lots, which were distributed by lottery. Settlers poured into the county following the lottery, most coming from Virginia, the Carolinas, and other parts of Georgia (White 1849; Temple 1989 [1935]:39). Settlements were generally scattered as the new residents began to prepare the land for cultivation. Marietta, established as the county seat in 1834, had about 100 inhabitants at that time and was growing steadily. Between 1832 and the start of the Civil War, the population of the county increased some 800 percent (Roth 1988:12).

In 1836, the State of Georgia authorized the construction of a state-owned railroad from the Tennessee state line near Chattanooga to a point on the Chattahoochee River where a connection could most easily be made with other private lines that had already been authorized. That point was the site of what would become Atlanta. Service was established on the Western & Atlantic Railroad from Atlanta to Marietta in 1845, connecting Cobb County with the rest of the state, and the rail was completed to Chattanooga by 1850 (Temple 1989 [1935]:100-103). The establishment of the railroad was important to the growth of Cobb County, and by the time of the Civil War a number of manufacturing concerns had been established, including the Sweetwater Factory (which produced yarn), the Marietta Paper Mill at Sope Creek (a forerunner of the Marietta Paper Manufacturing Company and, later, the Georgia Manufacturing & Public Service Company), and the Roswell cotton mills (Cobb County Federal Savings and Loan n.d.; Temple 1989 [1935]:405).

Even with this industrial growth, Cobb County's economy was based primarily on agriculture during the antebellum period. The vast majority of its citizens were involved in growing corn, wheat, and, to some extent, cotton, and raising livestock. A small minority of merchants, bankers, doctors, and lawyers served this dispersed farm population from small crossroads communities, offering the few goods and services that could not be provided by the farm.

During the three decades prior to the Civil War, the counties of the Georgia Piedmont had come to rely on the plantation system and slavery for the production of cotton, which soon became the number one cash crop in the state. Cobb County, like other counties in northwest Georgia where climate and terrain were not as suitable for plantations, did not wholly embrace the plantation system. Farms tended to be smaller because of this, and the slave population was low relative to the counties of the lower Piedmont. In 1845, 1,474 of the county's 10,518 inhabitants were slaves (Temple 1989 [1935]:199). Slaveholdings in Cobb County tended to be smaller than those in the lower Piedmont as well. In 1860, only five farmers in Cobb owned more than 50 slaves; by comparison, Monroe County in middle Georgia had 26 farmers who had 50 or more slaves. Although the large plantation was uncommon in Cobb County, cotton was still produced in large quantities. Cotton, corn, and wheat represented the three main cash crops in the county prior to the war (Wood and Wood 1987:7).

Cobb County would prove to be an important battleground in the Civil War. Because of its location across the Chattahoochee from the railroad center at Atlanta along the important Western & Atlantic Railroad, and because of its rugged terrain well suited to defensive positions, the county was of strategic significance in the defense of Atlanta.

William T. Sherman was put in charge of the Union army's Atlanta campaign in the spring of 1864. His goal was to drive a wedge into the South and to keep Johnston's Confederate army occupied while Grant tried to break Lee's Army of Northern Virginia. Sherman was in command of three armies totaling approximately 88,000 men in May 1864. Johnston, meanwhile, had only about half that many. Johnston's defensive strategy involved carefully executed retreats to prepared defensive positions in the mountainous countryside of North Georgia. In this way, he could engage Sherman on his terms, keeping his own losses low and luring Sherman deeper into Confederate territory, which would endanger his supply line. Sherman recognized Johnston's strategy and countered by using his superior numbers to flank Johnston, often forcing him to retreat before being able to inflict much damage. The two armies maneuvered in this way from Dalton to Cobb County, with engagements at Rocky Face, Dug Gap, Resaca, Cassville, Pickett's Mill, and New Hope Church (Scaife 1993).

Johnston's line in Cobb County stretched from Lost Mountain in the west to just north of Kennesaw Mountain in the east. Between June 14 and 18, Sherman pushed into the Confederate lines, finally forcing Johnston to abandon his advance position and retreat to the extensive works constructed on Kennesaw Mountain. Sherman had now tired of flanking maneuvers and determined that a frontal assault on the formidable line at Kennesaw would be worth the inevitable cost. Although he did suffer great losses at the Battle of Kennesaw Mountain, by late June Sherman's men occupied Marietta (McPherson 1988:750). Sherman's next major task was to secure a crossing of the Chattahoochee. As Sherman tested various areas north and south of the railroad crossing, Johnston constructed an impressive defensive line on the north side of the river from the Western & Atlantic railroad crossing south to the mouth of Nickajack Creek. Sherman determined that an attack on the line would be foolish and instead feinted to the right, while securing a crossing upriver, against a small contingent of

cavalry pickets. The first troops crossed the Chattahoochee at Sope Creek on July 7, 1864, and were followed by the rest of the Union army at various points along the river. Once across the river, Sherman's troops were deployed around the city.

The movement of the two armies through the countryside of Georgia devastated the land. The Confederate army cut down much of the timber to construct their works, and houses, fields, bridges, and other improvements were destroyed by the Union army and by artillery and intense musketry fire. In addition, although it was officially discouraged, both armies scavenged for food and looted valuables, a practice that continued even after the war (Temple 1989 [1935]:357). Although town and field were virtually destroyed by the war, and despite the scarcity of supplies and money, residents were determined to rebuild the county's economy. Mills destroyed during the war, including the Marietta Paper Mill, were rebuilt in the 1860s and 1870s, and a number of new manufactories opened as well (Temple 1989 [1935]:405–407).

Emancipation of the slaves meant the collapse of the plantation system, which had underpinned the Southern economy for many years. Nevertheless, it did not seriously threaten the dominance of the cotton economy, as the high price of cotton following the war encouraged a "cotton fever" throughout the South. After experiments with a federally enforced wage-labor system and with gang and squad labor, Southern farmers began to favor a variety of tenancy arrangements, in which a tenant worked the owner's land for a fixed payment or, more commonly, a share of the crop, as a substitute for the plantation system (Orser 1988:50–59).

Although not as reliant on the plantation system as other regions of Georgia, Cobb County was not able to escape the stifling effects of the tenant system. In 1880, the majority of farms in the county were operated by the owner, but by 1900, two-thirds of the county's farms were operated by tenants (Scott 1978:177). Despite fluctuating prices, cotton remained the chief product of agriculture on Cobb County farms throughout the first four decades of the twentieth century, although other products were produced as well, including corn, dairy products, and cattle. In the 1930s and 1940s, low cotton prices and an economy faltering from dependence on imported products encouraged diversification in agriculture and increased industrialization. By 1950, less than 20 percent of the county's farms were growing cotton (Roth 1988:32, 42).

In the early 1900s, the city of Marietta began to upgrade and improve its infrastructure. The efforts yielded a new waterworks in 1910 and electric street lights in 1912 (Temple 1989 [1935]:476). The new waterworks effectively ended the municipal use of the water system developed by the Georgia Manufacturing & Public Service Company. As noted earlier, the assets of the company were sold to a succession of owners between 1910 and the early 1940s. It is not clear if the water and power system at Big Lake was ever utilized again following the 1910 sale and the construction of the city waterworks that same year.

New twentieth-century industries in Cobb County included the Acworth Mills and the Clark Thread Mills near Austell. The Acworth Mills began in 1905 as the Acworth Cotton Manufacturing Company. The mill produced cotton yarns successfully until the early 1920s, when, with changes in fashion and in the textile industry generally, a change in ownership and direction was made. In 1923, the mill was incorporated as the Acworth Mills, and a period of expansion both in facilities and products was initiated. The Clark Thread Mill, which produced industrial sewing thread, was established in 1931 (Temple 1989 [1935]:494–496). Both mills constructed adjacent mill villages that included worker and manager housing as well as public buildings.

Beginning in 1941, Cobb County began assembling land for a city airport at the location of present-day DARB. The U. S. Army Corps of Engineers built the airport, known as Rickenbacker Field, and completed it in 1942 (Roth 1988:54). In that same year, the land containing Big Lake Dam was purchased by the federal government (CCSC 1942: DB 146:397, 147:281). In 1943, the government leased space to the Bell aircraft company for the construction of a B-29 bomber manufacturing plant. The Bell Bomber Plant was a huge boost to the local economy, providing jobs and supporting local merchants and service providers during the WWII years. After sitting idle for five or six years, the plant was taken over in 1951 by the Lockheed Aircraft Corporation, which continues to operate it to this day under the name Lockheed Martin Aeronautical Systems (Roth 1988:54).

### PART III. ARCHITECTURAL/ENGINEERING INFORMATION

#### A. General Statement

Big Lake Dam is a straight-crested gravity storage dam built in 1906. It demonstrates an early use of concrete construction in Georgia and at 550' is one of the longest dams in the state. The dam and the 28-acre lake it impounds were built to provide water to the city of Marietta and water and power to a local paper mill owned by the builder of the dam. Larger concrete dams were built in the state in the years immediately following the construction of Big Lake Dam and were also utilized for power production (Jackson 1988:170–172). Big Lake Dam, however, survives as perhaps the earliest identified concrete dam in the state. While the other dams continue to produce electricity to this day, Big Lake Dam provided water and power for only a short time. Though altered with the addition of a concrete and stone cap, a later outtake structure, and modern metal stairs, and though it evidences deterioration due to water damage and encroaching vegetation, the dam retains its original form and elements, including its long northern and southern abutments, its spillway, and its date plaque. The standpipes, pumps, underground pipes, associated machinery, and plant in Marietta that were part of the overall water and power system no longer survive. Big Lake Dam and Big Lake are a rare example in Georgia of a fairly large-scale water impoundment facility constructed for a small municipality.

Big Lake Dam is in fair to poor condition overall, with the spillway and adjacent areas constituting the least stable and most eroded portion of the dam. The concrete of the downstream side of the dam exhibits areas of crumbling and spalling, and numerous surface cracks exist. Water is seeping both through and under the dam. Sediments in the lake—likely containing hazardous materials—have silted the lake and are putting pressure on the dam.

#### B. Description

Big Lake Dam, which impounds Big Lake, is located in the north-central portion of DARB, south of Atlantic Avenue and west of Fourth Street. The dam is a straight-crested gravity storage dam of concrete construction. The concrete of the dam is imbedded with small aggregate and large stones, a type of material known as cyclopean concrete (Jackson 1988:193). The larger stones are thought to have been "plumstones," which were used in early-twentieth-century dam construction to tie adjoining layers of concrete together. The dam measures approximately 550' in length by 27' in height (at its highest point at the spillway). The northern abutment is approximately 150' long, while the southern abutment is some 300' long.

The spillway opening measures approximately 35' in width. The profile, or cross-section, of the dam is essentially that of a right triangle, with the vertical side facing the lake and the 45-degree side facing downstream. The dam's base is keyed into the rock below it. The rock varies in consistency and density, from unweathered to heavily weathered. A portion of the spillway also rests on a large concrete slab. The lake has an area of approximately 28 acres, though roughly half of the acreage has become silted and likely contaminated with hazardous materials (Soils Section 1995:1–4, Figures 1–3; SAD Laboratory 1994:1). It is not known if the present size of the lake matches its original size. There is evidence of silting, yet there may also have been bank erosion over time, resulting in little net change to the overall area of the lake.

The dam features a later concrete and stone cap along its crest, ranging in height from a few inches to roughly 1′. The concrete in the area of the spillway has deteriorated over time and shows signs of later concrete and stone patchwork (Soils Section 1995:2, 5; SAD Laboratory 1994:3). The original configuration and width of the spillway opening are not known, but presently water flows over the spillway unobstructed. A gated intake structure of concrete and wood protrudes from the lake some 80′ north of the spillway, only a few feet from the northern abutment. It has become silted and no longer functions. A modern metal stair and catwalk leads from ground level to an outtake pipe at the base of the dam on the downstream side (SAD Laboratory 1994:3). The stair and catwalk rests on a concrete slab. A square opening beneath the catwalk marks the location of the former outtake tunnel. A steel frame is attached to the face of the dam above the catwalk. It is a modern fixture, and its original use is not known. The dam also evidences a modern metal ladder-type stair that accesses the crest; it is located some 55′ north of the spillway on the downstream side of the northern abutment. Approximately 40′ farther north is the original marble date plaque set in the face of the northern abutment.

Two concrete buttresses are located on the downstream side of the southern abutment. The larger of the two buttresses is located approximately 150' south of the spillway. It meets the abutment at roughly a 45-degree angle and rises from ground level to just below the cap. It is approximately 1' wide and exhibits beveled edges. The smaller buttress is located some 145' farther south. It also meets the abutment at roughly a 45-degree angle and rises halfway up the face (the abutment is only about 2' above ground level at this location). The buttress is some 18" wide where it meets the abutment and tapers to about 1' in width at the opposite end. It is keyed into a concrete ledge that extends along the abutment to the north for some 20'. It is not known if the buttresses are original or if they were added later.

As noted, Big Lake Dam is in fair to poor condition overall, with the spillway area evidencing the most instability and deterioration. Erosion at the spillway has removed the concrete face, exposing the underlying stone and aggregate. Generally, the downstream side of the dam exhibits areas of crumbling and spalling concrete, which have been repaired over the years with mortar patches (with varying levels of success). Numerous surface cracks exist, caused by water leaching through and under the dam and by the root action of vines and other vegetation. The percolating water is evidenced by moisture on the face of the dam and pools of water collecting on the ground near the dam and in low areas of Fourth Street. It is felt that the seepage is due to defects in the way in which the layers of concrete comprising the dam were poured. There is also the issue of the sediments in the lake, which put pressure on the dam and likely contain hazardous materials. Studies have determined that the stability of the spillway area is of greater concern than the water seepage problem. Proposed corrective measures include the construction of a large concrete bolster against the downstream side of

the dam for stability and the installation of underground drains to collect and disperse water (Soils Section 1995:2, 4–5, 7–8; SAD Laboratory 1994:2, 5–6).

The above- and below-ground elements of the water and power system—the pipelines, the pumps and other machinery, and any associated buildings—that were located at the dam and to the south where the DARB east-west runway lies, are no longer in evidence. Those elements of the system in Marietta, such as pipelines and standpipes, are also not evident or intact.

## C. Site

Big Lake Dam and its reservoir are presently bounded by forest (or at least a wooded buffer) to the west, south, southeast, and northeast. The north side of the lake is mostly open and has been planted in lawn. It is part of a recreation area featuring a picnic shelter and tables and a playground. A campsite area is located to the northwest. Two wood docks protrude into the lake from the north bank. The east side of the lake, where the dam is located, is open but is heavily overgrown, mostly with kudzu. Fourth Street, a paved two-lane road, passes by the dam and lake to the east and dead-ends to the south at the DARB east-west runway. Except for the recreation area to the north and the elevated runway to the south, the general surroundings of the dam and lake likely resemble what they did historically.

## PART IV. SOURCES OF INFORMATION

No drawings or early views of the dam or lake have been located to date, either in the historical record or in the DARB files. The following primary and secondary sources were consulted for the preparation of this report.

Bankston, J. C., Jr.

1996 Interview by Jeffrey Holland. Videotape recording, 5 June. On file, TRC Garrow & Associates, Inc., Atlanta, Georgia, and Environmental Flight, Dobbins Air Reserve Base, Marietta, Georgia.

Cobb County Federal Savings and Loan

n.d. Historic Cobb County. Cobb County Federal Savings and Loan, Marietta, Georgia.

Cobb County Superior Court Clerk's Office (CCSC)

1906–1942 Deed Records. On file, Cobb County Courthouse, Building 3, Marietta, Georgia.

Jackson, Donald C.

1988 Great American Bridges and Dams. The Preservation Press, National Trust for Historic Preservation, Washington, D.C.

Marietta Journal

1895–1906 Microfilm on file, Cobb County Public Library, Marietta, Georgia.

McPherson, James M.

1988 Battle Cry of Freedom: The Civil War Era. Ballantine Books, New York.

Orser, Charles E., Jr.

1988 The Material Basis of the Postbellum Tenant Plantation: Historical Archaeology in the South Carolina Piedmont. University of Georgia Press, Athens.

Roth, Darlene R.

1988 Architecture, Archaeology and Landscapes: Resources for Historic Preservation in Unincorporated Cobb County, Georgia. Submitted to and published by the Cobb County Historic Preservation Commission, Cobb County, Georgia.

SAD Laboratory

1994 Crack Survey Report for Big Lake Dam, Dobbins AFB, Cobb County, Georgia. SAD Laboratory, U.S. Army Corps of Engineers, Savannah District, Savannah, Georgia. Submitted to U.S. Army Corps of Engineers, Savannah District, Savannah, Georgia.

Scaife, William R.

1993 The Campaign for Atlanta. Published by the author, Atlanta.

Scott, Thomas Allan

1978 Cobb County, Georgia, 1880–1900: A Socioeconomic Study of an Upper Piedmont County. Ph.D. dissertation, University of Tennessee, Knoxville.

Soils Section, Geotechnical and HTRW Branch, U.S. Army Corps of Engineers, Savannah District

1995 Seepage Investigation, Big Lake Dam, Dobbins Air Reserve Base, Georgia. Soils Section, Geotechnical and HTRW Branch, U.S. Army Corps of Engineers, Savannah District, Savannah, Georgia. Submitted to Base Civil Engineering, Dobbins Air Reserve Base, Marietta, Georgia.

Temple, Sarah Blackwell Gober

1989 [1935] *The First Hundred Years: A Short History of Cobb County, Georgia.* Reprinted. Agee Publishers, Inc., Athens, Georgia, for the Cobb Landmarks and Historical Society, Inc. Originally published in 1935 by the author.

Wheaton, Thomas R., Jr., and Mary Beth Reed

1989 The First Marietta Waterworks: A Preliminary Archaeological and Historical Assessment of the Life Student Center Site. New South Associates, Inc., Stone Mountain, Georgia. Submitted to Life College, Marietta, Georgia.

White, George

1849 Statistics of the State of Georgia. W. Thorne Williams, Savannah, Georgia.

Wood, W. Dean, and Karen G. Wood

1987 Soldiers and Citizens: Civil War Actions around Latimer's Farm, Cobb County, Georgia. Southeastern Archeological Services, Athens, Georgia. Submitted to Marietta Country Club, Marietta, Georgia.

### PART V. PROJECT INFORMATION

This report was prepared in the fall of 1998 as mitigation for proposed impacts to Big Lake Dam. Consultation in compliance with Section 106 of the National Historic Preservation Act of 1966, as amended, among Dobbins Air Reserve Base, the Georgia Historic Preservation Division, and the United States Air Force determined that proposed repair and maintenance activities would permanently and adversely alter the appearance of the dam. The consultation led to the formulation of a Memorandum of Agreement, which stipulated the preparation of Historic American Engineering Record documentation.

The recordation of Big Lake Dam was undertaken by TRC Garrow Associates, Inc., of Atlanta, and sponsored by Dobbins Air Reserve Base. M. Todd Cleveland served as project manager and prepared the architectural/engineering sections of this report. Jeffrey L. Holland conducted the background research and prepared the historical sections of the report. Vincent G. Macek took the large-format photographs and prepared the site plan.

